PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

June 5th, 1918.—Mr. G. W. Lamplugh, F.R.S., President, in the Chair.

The following communication was read :---

'The Kelestominæ, a Sub-Family of Cretaceous Cribrimorph Polyzoa.' By William Diekson Lang, M.A., F.G.S.

The Kelestominæ are a sub-family of Pelmatoporidæ. The latter are a family of Cretaceous cribrimorph Polyzoa, whose costæ are prolonged upwards as hollow spines from the median area of fusion of the intraterminal front-wall. The broken ends of these spines form a row of pelmata (or, if small, pelmatidia) on the intraterminal front-wall.

The Kelestominæ are Pelmatoporidæ with an apertural bar each half of which is bifid; and the proximal and distal forks of each half are fused with the corresponding forks of the other half. The fused distal forks are also fused with the proximal pair of apertural spines, which are greatly enlarged.

The simplest known form of this arrangement is seen in the genus *Kelestoma* Marsson. *Kelestoma* is characterized among the Kelestominæ by its great œcial length, and by the great number of costæ. *Kelestoma* has the following three species, which form a single lineage :—(1) *Kelestoma elongatum* Marsson, with an incrusting asty; (2) a new species, with a bilaminar, erect asty; (3) *K. scalare* Lang, with an erect, cylindrical asty. There is, in this series, a slight catagenetic decrease in the number of costæ, and the avicularian aperture becomes somewhat more pointed. The genus occurs in the Senonian, zone of *Belemnitella mucronata*, in the island of Rügen.

Morphasmopora, unlike Kelestoma, retains a small number of costæ and a short œcium; but the thickness of the proximal apertural spines, which are hardly recognizable as such, is enormously increased; the thickness of the bifid apertural bar is also increased. In Morphasmopora brydonei Lang, there are four circum-apertural avicularia; and the proximal apertural spines and the apertural bar, though enormously developed, are not so large as in M. jukes-brownei (Brydone). The latter species has fewer costæ than the former, and but one pair of circum-apertural avicularia. There are also differences in the interœcial and interstitial secondary tissue of the two species. M. brydonei occurs in the island of Rügen and M. jukes-brownei at Trimingham; both from the Senonian, zone of Belemnitella mucronata.